

EXHIBIT 1-ATTACHMENT F

**SIERRA CLUB COMMENTS ON
CONSENT DECREES, ATT. F:**

**CONSTRUCTING CONVENTIONAL
TREATMENT PLANT AT OR NEAR
SSO 700**

**(EXHIBIT TO KARNEY AND ELMARAGHY
DEPOSITIONS)**

CONSTRUCTING CONVENTIONAL TREATMENT PLANT AT OR NEAR SSO 700.

Advantages of Conventional Treatment Plant

1. Conventional treatment plant would be considered a permanent solution to discharges from SSO 700.
2. Diverting the waste flow from the sewershed upstream of SSO 700 would reduce the load entering the Mill Creek WWTP.
3. Water quality of Mill Creek downstream of the discharge point would be improved due to effluent limitations imposed under an NPDES Permit for a treatment plant versus untreated flows currently being discharged from SSO 700 under wet weather conditions which are unregulated.
4. By properly sizing the plant, capacity would be available to provide service to northern Hamilton County and southern Butler County as it develops.
5. Conventional treatment can be designed to produce an effluent containing relatively low concentrations of contaminants.

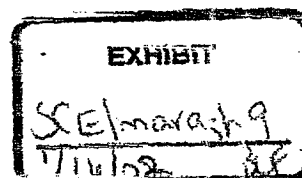
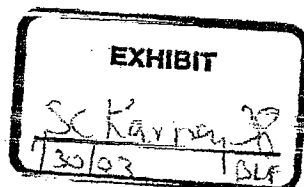
Construction of a conventional treatment facility would likely result in a successful antidegradation review and issuance of a PTI due to the following:

- Elimination of SSO 700,
- Improvement of the existing water quality in Mill Creek,
- Reduction in pollutant loads entering the Mill Creek WWTP.

A conventional treatment facility near the location of SSO 700 would capture approximately 70% to 80% of all flows generated in the East Branch Mill Creek Drainage Basin. Only a small portion of the EDMC basin found south of the SSO would continue to contribute flows to the Mill Creek WWTP.

Preliminary review of the following available instream flows, water quality, along with dry and wet weather flows from the 42 inch main line sewer was reviewed to determine if construction of a conventional treatment plant was feasible.

- Mill Creek Dry weather Flow: 20.29 cfs (Field measurement on 6/16/99 near SSO 700)
- Temperature : 25.5°C (Field measurement on 6/16/99 near SSO 700)
- pH: 7.99 S.U.: (Field measurement on 6/16/99 near SSO 700)
- Dry weather flow (42 inch sewer): 21.7 cfs (14 MGD—Mark Kron)
- Wet weather flow (42 inch sewer): 35.6 cfs (23 MGD—Mark Kron)



COL1 009064

Comparison of Dry and Wet Weather Sampling Results, 1999

PARAMETER	DRY WEATHER RESULTS	WET WEATHER RESULTS
Fecal Coliform	450 #/100 ml	96400 #/100 ml
<i>E. coli</i>	290 #/100 ml	18000 #/100 ml
TSS	26 mg/l	268 mg/l

A conventional treatment plant with the following effluent quality should be acceptable to the Ohio EPA, and should result in issuance of a PTI.

PARAMETER	30 DAY LIMIT	7 DAY LIMIT	MAXIMUM/MINIMUM LIMIT
CBOD ₅ (mg/L)	10.0	15.0	n/a
Total Suspended Solids (mg/L)	12.0	18.0	n/a
NH ₃ -N (mg/L)-summer	1.0	1.5	n/a
winter	3.0	4.5	
Dissolved Oxygen (mg/L)	n/a	n/a	6.0 (minimum)
Total Residual Chlorine (mg/L)	n/a	n/a	0.038 (maximum)